(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



550410 A BRANK BUNDAN NI BARNIK KURIN BANIN BANIN BARN AND AND KANAN KURIN BANIK BUNDA KURIN KARA BURIKAN KARA KURIN K

(43) International Publication Date 7 October 2004 (07.10.2004)

(10) International Publication Number WO 2004/085637 A1

(51) International Patent Classification7:

C12N 9/02

(21) International Application Number:

PCT/GB2004/001383

(22) International Filing Date: 25 March 2004 (25.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0306782.4

25 March 2003 (25.03.2003) GB

- (71) Applicant (for all designated States except US): NEUTEC PHARMA PLC [GB/GB]; Clinical Sciences Building, Central Manchester Healthcare Trust, Oxford Road, Manchester, Lancashire M13 9WL (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BURNIE, James Peter [GB/GB]; 1 Greystoke Drive, Alderley Edge, Cheshire SK9 7PY (GB). MATTHEWS, Ruth, Christine [GB/GB]; 1 Greystoke Drive, Alderley Edge, Cheshire SK9 7PY (GB).
- (74) Agents: MCCALLUM, Graeme, David et al.; Lloyd Wise, McNeight & Lawrence, Highbank House, Exchange Street, Stockport, Cheshire SK3 0ET (GB).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TREATMENT OF INFECTION DUE TO CLOSTRIDIUM DIFFICILE

(57) Abstract: The present invention discloses a Clostridium difficile lactate dehydrogenase comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence exhibiting at least 70, 80, 90, 95, 96, 97, 98, 99, or 99.5% identity with the amino acid sequence of SEQ ID NO: 2. A Clostridium difficile lactate dehydrogenase comprising the amino acid sequence of SEQ ID NO: 2. Also disclosed are nucleic acid sequences encoding same, vectors and host cells, antibodies against same, medicaments and methods of manufacture of a medicament for the treatment of a Clostridium difficile infection, and diagnostic test kits and diagnostic test methods for same.



